

## ABSTRACT OF THE DISCLOSURE

5           A technique for read error failover processing in a mirrored disk system such as  
a Redundant Array of Inexpensive Disks (RAID) system, where individual disk units  
perform Logical Block Address (LBA) remapping. A read error causes a disk controller  
to report an "unrecoverable" read error to a RAID controller. After receiving this report  
of an unrecoverable read error, rather than simply switching over to a mirror, the RAID  
10       controller first checks to see whether the disk that caused the error can successfully  
reassign an LBA. In particular, the RAID controller can retrieve the data that was  
associated with the failed LBA from the mirror, and then write that data to the offending  
disk. The disk controller for that disk will then perform its standard LBA remapping,  
and write the data to a new, good sector. Only if this process does not succeed is the  
15       offending disk then treated by the RAID controller as having failed sufficiently to  
require failover to the mirror.